



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,264	08/30/2001	Donald K. Johnson	BEA920010018US1	1036
30011	7590	04/20/2004	EXAMINER	
LIEBERMAN & BRANDSDORFER, LLC 12221 MCDONALD CHAPEL DRIVE GAIITHERSBURG, MD 20878			DUNCAN, MARC M	
			ART UNIT	PAPER NUMBER
			2113	
DATE MAILED: 04/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/944,264	JOHNSON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Marc M Duncan	2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 30 August 2001.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-18 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 30 August 2001 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

### ***Status of the Claims***

Claims 1-10 and 15-18 are rejected under 35 USC 102(e).

Claims 11-14 are rejected under 35 USC 101.

Claims 8-10 are rejected under 35 USC 112, second paragraph.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-10 are system claims that depend from claim 6, a method claim. The examiner believes this is a typographical error and that the claims should depend from claim 7. The examiner has examined the claims under this interpretation in order to provide a complete examination under the current practice of compact prosecution. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 11 recites a computer readable medium

and two pieces of code. Such a claim does not meet the statutory requirement for a process, machine, article of manufacture or composition of matter. Claims 12-14 contain the limitations of claim 11 and therefore contain the non-statutory subject matter of claim 11. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Frey.

Regarding claim 1:

Frey teaches dynamically loading a module to a kernel of an operating system running in said computer system on page 6 under the comment /\*load the module\*/.

Frey teaches allocating contiguous physical memory by said kernel on page 1, Memory Mappings and Memory Allocation in the Kernel.

Frey teaches accessing said contiguous physical memory from a user process address space of a user level program on page 2, Mapping Kernel Virtual Addresses into User Space.

Frey teaches performing memory diagnostics on said contiguous physical memory by said user level program on pages 11 and 12, Test Application.

Regarding claim 2:

Frey teaches wherein said accessing said contiguous physical memory comprises mapping said contiguous physical memory from a kernel address space to said user process address space on page 2, Mapping Kernel Virtual Addresses into User Space and on page 9, method 2.

Regarding claim 3:

Frey teaches wherein said user level program controls physical memory displacements between accesses on page 1, Memory Mappings and Memory Allocation in the Kernel. An area that is contiguous in both the physical and virtual memory allows the program to control memory displacements between accesses.

Regarding claim 4:

Frey teaches further comprising the step of deallocating the memory on page 8, under the comment /\*and free the two areas\*/.

Regarding claim 5:

Frey teaches further comprising the step of dynamically unloading the module on page 7, under the comment /\*remove the module\*/.

Regarding claim 6:

Frey teaches wherein said contiguous physical memory is also contiguous virtually on page 1, Memory Mappings and Memory Allocation in the Kernel.

Regarding claim 7:

Frey teaches a dynamically loadable kernel module of an operating system running in said computer system on page 6 under the comment /\*load the module\*/.

Frey teaches a kernel memory allocator responsive to said module, said allocator allocating contiguous physical memory on page 1, Memory Mappings and Memory Allocation in the Kernel.

Frey teaches a user process address space capable of accessing said contiguous physical memory on page 2, Mapping Kernel Virtual Addresses into User Space.

Frey teaches a user level memory diagnostic program capable of running in said user process address space on pages 11 and 12, Test Application.

Regarding claim 8:

Frey teaches wherein said contiguous physical memory is mapped from a kernel address space to said user process address space on page 2, Mapping Kernel Virtual Addresses into User Space and on page 9, method 2.

Regarding claim 9:

Frey teaches wherein said user level memory diagnostic program controls physical memory displacements between accesses on page 1, Memory Mappings and Memory Allocation in the Kernel. An area that is contiguous in both the physical and virtual memory allows the program to control memory displacements between accesses.

Regarding claim 10:

Frey teaches wherein said contiguous physical memory is also contiguous virtually on page 1, Memory Mappings and Memory Allocation in the Kernel.

Regarding claim 15:

Frey teaches dynamically loading a module to a kernel of an operating system running in said computer system on page 6 under the comment /\*load the module\*/.

Frey teaches allocating contiguous physical memory by said kernel on page 1, Memory Mappings and Memory Allocation in the Kernel.

Frey teaches mapping said contiguous physical memory from a kernel address space to a user process address space of a user level program on page 2, Mapping Kernel Virtual Addresses into User Space.

Frey teaches performing memory diagnostics on said contiguous physical memory by said user level program on pages 11 and 12, Test Application.

Regarding claim 16:

Frey teaches wherein said user level program controls physical memory displacements between accesses on page 1, Memory Mappings and Memory Allocation in the Kernel. An area that is contiguous in both the physical and virtual memory allows the program to control memory displacements between accesses.

Regarding claim 17:

Frey teaches further comprising the step of deallocating the memory on page 8, under the comment /\*and free the two areas\*/.

Regarding claim 18:

Frey teaches further comprising the step of dynamically unloading the module on page 7, under the comment /\*remove the module\*/.

***Double Patenting***

Applicant is advised that should claim 2 be found allowable, claim 15 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not relied upon contains elements of the instant claims and/or represents a current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc M Duncan whose telephone number is 703-305-4622. The examiner can normally be reached on M-T and TH-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 703-305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md



ROBERT BEAUSOLIEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100